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a. Central Atlantic Regional Ecological Test Site: A Prototype
Regional Environmental Information System. (ERTS-A Proposal No. 56)

- b. IN-125
- c. Statement and explanation of any impedance.

 No ERTS data of any type has been transmitted to the Principal

 Investigator.
- d. Accomplishments during the reporting period and those planned for the next period.

The Level II Land Use Data base for the CARETS region is 90 percent completed using RB-57 color infrared photography as the basic source of information. RICHEL, the first priority sub-area of the CARETS region, has been field checked to correct errors and uncertainties in imagery interpretation. A multi-discipline team has completed preliminary study of the Norfolk-Portsmouth SMSA during the summer, illustrating and testing the procedures for environmental impact analysis of the land use information which are to be undertaken later in other parts of the CARETS region.

During the next reporting period, it is expected that ERTS imagery of the CARETS area will be received. The Norfolk-Portsmouth SMSA is currently the area of highest priority interest, because analysis of that area has proceeded farther and it is hence being used as a prototype of the entire CARETS region. A report on the Norfolk study is being prepared.

e. Scientific results and practical applications.

Prior to the actual testing of data from ERTS, the principal scientific results to date are the establishment of a model or design for a regional land use information system based on

remote sensor data and a firm establishment of the RB-57 type high altitude aircraft data base as an important tool in land use mapping. Preliminary user evaluations of the resulting land use data have been favorable, and one of the states, Maryland, has adopted the USGS-GAP land use system as a first step towards mapping their entire state. The State is funding an extension (to the west) of the part of Maryland not covered by CARETS, using the GAP land use classification and mapping procedures. (Category 10C)

f. Published reports or talks.

"Central Atlantic Regional Ecological Test Site," by Robert H. Alexander, Fourth Annual Earth Resources Program Review, v. III, (pp. 1-23, Section 72).

"A Land Use Classification Scheme for Use with Remote Sensor Data,"
Inter-Agency Steering Committee on Land Use Information and
Classification, 1972, U.S. Geological Survey, 205 p., illus.

g. Recommendations for improvement.

Recommend color additive composites be made for improved ability to extract land use information.

h. A major change in the Standing Order form.

Request MSS data to support this investigation due to the lack of RBV data. Color additive composites would greatly enhance interpretation and give the most benefits to the investigation.

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CENTRAL ATLANTIC REGIONAL ECOLOGICAL TEST SITE: A PROTOTYPE REGIONAL ENVIRONMENTAL INFORMATION SYSTEM

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